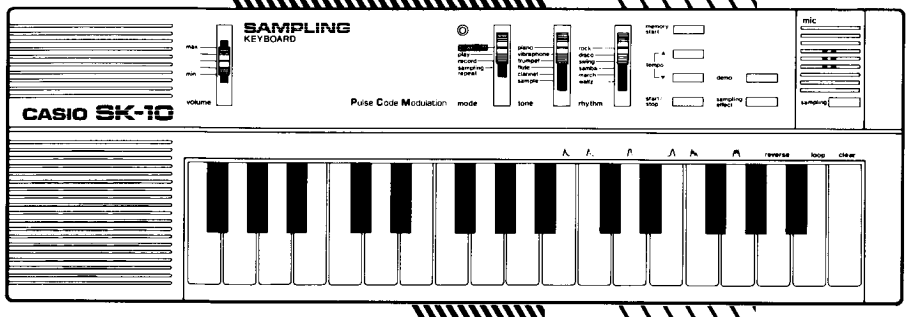
SK-10

ELECTRONIC MUSICAL INSTRUMENT
INSTRUMENTO MUSICAL ELECTRONICO

SPARE PARTS MASTER

OPERATION MANUAL 1

MANUAL DE OPERACION 19



CASIO®

英 西

INTRODUCTION

Your new CASIO SK-10 is a state-of-the-art musical instrument which uses the latest digital technology to make its operation as simple as possible. In addition to preset keyboard tones and rhythms, the SK-10 lets you "sample" (digitally record) sounds and integrate them as keyboard voices. A unique new sampling repeat function lets you put sampled sounds into any of 16 preset patterns at random. The SK-10 also features advanced functions such as a memory function that lets you record your own melodies, and a Disney-tune demonstration mode. In order to fully enjoy all of the features and functions of the SK-10, be sure to read this manual carefully before using your new Casio keyboard.

CONTENTS

2 MAIN FEATURES
3 CONTROL LOCATIONS
5 CHOOSING A POWER SUPPLY
7 PLAYING NORMALLY
8 USING SOUND SAMPLING
10 USING SAMPLING REPEAT FUNCTION
11 USING AUTO-RHYTHMS
12 PLAYING DEMONSTRATION TUNES
13 USING THE MEMORY FUNCTION
14 TROUBLESHOOTING
15 CARE OF YOUR KEYBOARD
16 SPECIFICATIONS

MAIN FEATURES

- **Preset Tones** — simulate 5 different instrument sounds:
  •Piano •Vibraphone •Trumpet
  •Flute •Clarinet
  (Pipe organ tone is also preset in the "sample" area when the power is turned on.)

- **Auto-Rhythms** — let you accompany the music with 6 preset rhythms.

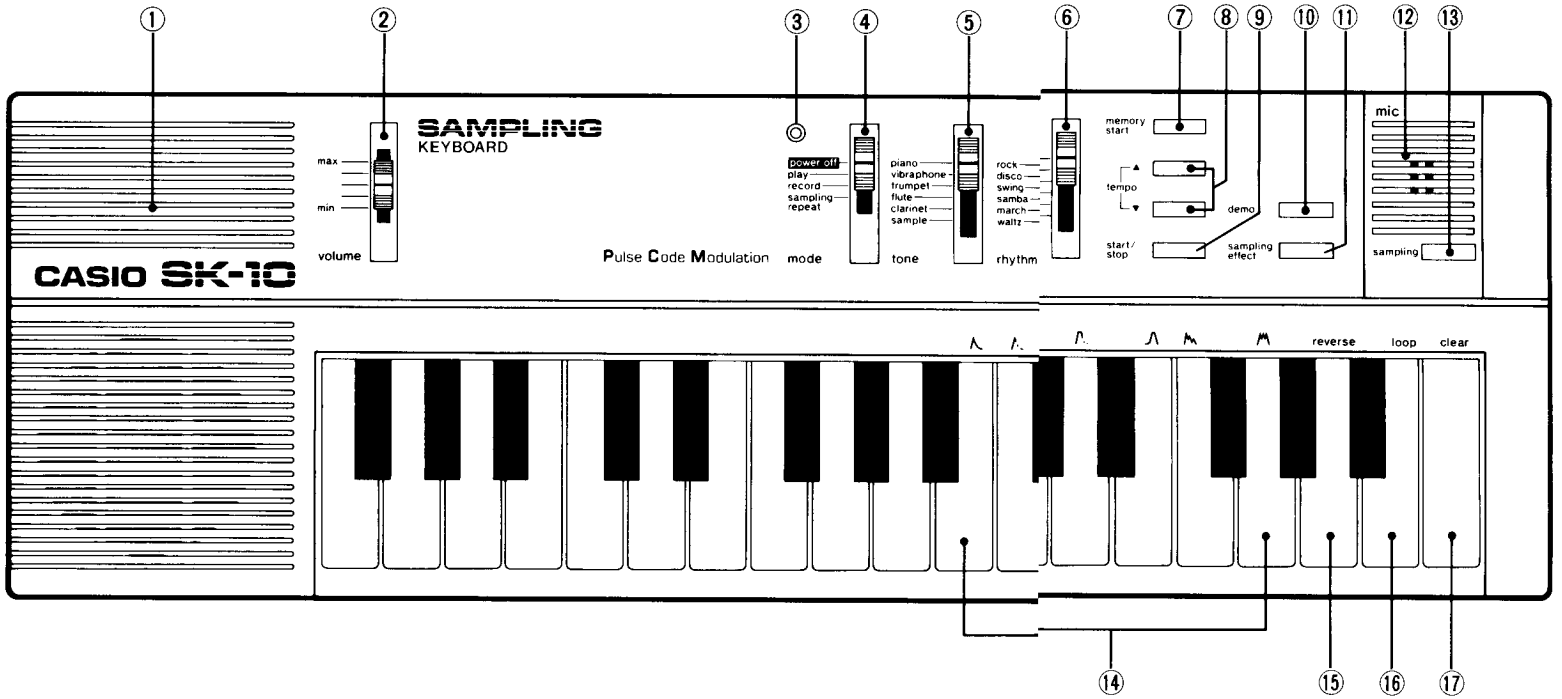
- **Sound Sampling** — lets you record any sound using the built-in microphone.

- **4 Preset Demonstration Tunes** — let you listen to preset Disney tunes in an endless loop.

- **Sampling Repeat Function** — lets you enjoy 16 different auto-playback patterns featuring a sampled sound, each time a new sound is sampled.

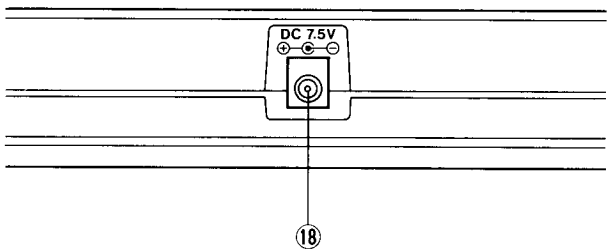
- **Memory Function** — lets you record your composition as you play it on the keyboard.

CONTROL LOCATIONS



① Built-in speaker
② Volume control
③ Power indicator
④ Mode selector
⑤ Tone selector
⑥ Rhythm selector
⑦ Memory start button
⑧ Tempo control buttons
⑨ Start/stop button
⑩ Demonstration button
⑪ Sampling effect button
⑫ Built-in microphone
⑬ Sampling button
⑭ Envelope keys
⑮ Reverse key
⑯ Loop key
⑰ Clear key

<BACK PANEL>



⑱ AC adaptor jack

CHOOSING A POWER SUPPLY

This unit operates on both AC and DC power. Be sure to set the mode selector to "power off" when replacing batteries or connecting the AC adaptor to the unit.

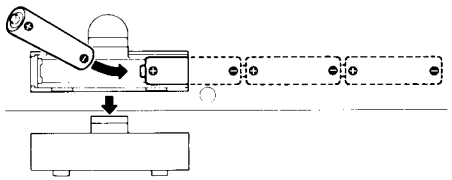
DC POWER

•Dry batteries

This unit can be powered by 5 AA size (SUM-3) manganese dry batteries. Weakened batteries will result in lower volume or poor tonal quality. The power indicator lamp will gradually lose its brightness when battery power weakens. At this time, change batteries or shift to one of the alternate power sources mentioned below.

Inserting batteries

1) Press down on the battery compartment cover, located on the bottom of the unit, and slide it in the direction of the arrow.



2) Insert five AA batteries taking care that polarity is correct.

*When replacing old batteries to new ones, it is advisable to replace all five batteries at the same time for longer battery life.

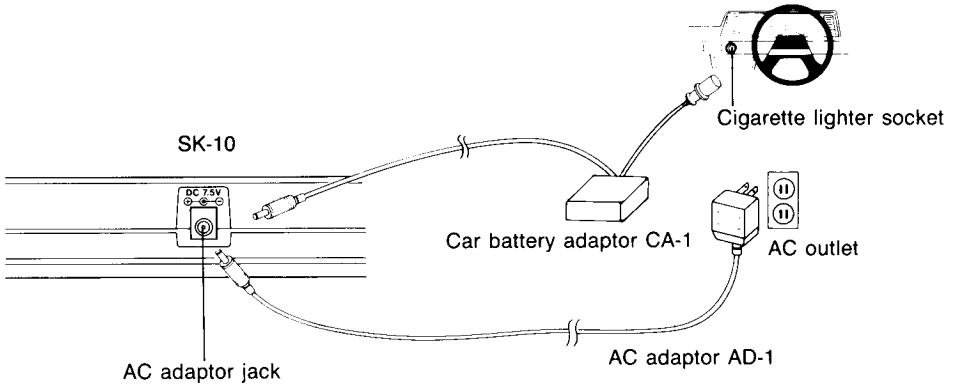
*Standard battery life is approximately 8 hours.

•Car battery

With the car battery adaptor (CA-1, optional), DC power is supplied from a car battery through the cigarette lighter socket.

AC POWER

An AC adaptor (AD-1, optional) is required to connect to an AC outlet, Use only an adaptor with the same voltage rating (100, 117, 220, or 240) as the power supply in your area to prevent component damage. Plug the AC adaptor into the AC outlet and the cord into the unit. This will automatically cut off the battery power supply.



•Auto power off function

Power is automatically cut off approximately 7 minutes after the last operation of the unit. Power supply can be restored by switching power OFF and then ON again.

**Auto power off does not activate when the mode selector is set to "sampling repeat".*

CAUTION

*Use only genuine CASIO adaptors to avoid risk of damage.

*Remove batteries from the battery compartment when the unit is not used for extended periods. (Battery leakage can damage electrical parts.)

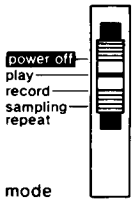
*The adaptor may become warm when left connected to an outlet. This is normal, but the adaptor should be disconnected when not in use.

***THE FOLLOWING CONDITION CAN CAUSE BATTERIES TO BURST:**

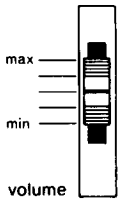
1. *Use of adaptors other than genuine CASIO adaptors.*
2. *Loading batteries with polarities reversed.*

PLAYING NORMALLY

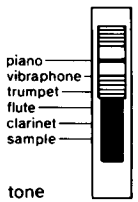
1. Set the mode selector switch to "play".



2. Adjust the volume by sliding the volume control.



3. Select one of the preset tones by the tone selector.



**Every time you switch the unit on and then set the tone selector to "sample", the pipe organ tone is selected.*

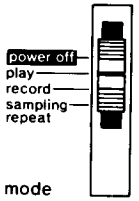
4. Now you are ready to play. Up to 4 notes can be played simultaneously on the keyboard (4-note polyphonic).

USING SOUND SAMPLING

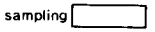
You can record any kind of sound using your SK-10. The unit converts the sound into digital information that can be used to create a new tone.

•Sampling a Sound

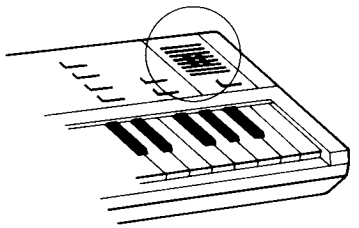
1. Set the mode selector to "play".



2. Press the sampling button.



3. Produce the sound to be sampled near the built-in microphone. Sampling begins automatically when sound is detected (auto trigger).



4. A short tune using the sampled sound indicates that sampling is complete. Now, the sampled sound can be played on the whole keyboard. (regardless of the position of the tone selector).

Sampled sound can be played in its original pitch on the A4 key.

**If you sample another sound, the sound you previously sampled will be automatically erased.*

**If you switch the unit off (or when auto power off function activates), the sampled sound will be automatically erased and "pipe organ" tone will be reassigned to tone selector "sample" position.*

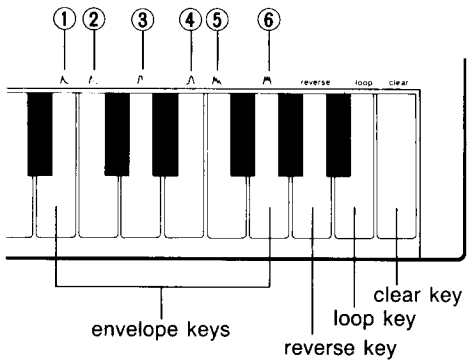
If you move the tone selector and select a different tone after sampling, your sampled sound will be automatically assigned to the tone selector "sample" position in place of "pipe organ".

•Adding Loop, Reverse, and Envelope Effects to Sampled Sounds

You can modify a sampled sound using any or all of the following special effects:

- •Loop — Lets you lengthen a sampled sound. You can repeat the sound continuously by pressing a melody key.
- •Reverse — Plays a sampled sound backward.
- •Envelope — Modifies a sampled sound by changing the sound wave shape.

The following gives some idea of the quality you can expect for each of the envelope keys. To get a clearer idea of the effect each envelope key has on the sampled sounds, modify the same sampled sound using each envelope key.

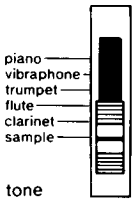


① Piano/Guitar damped tone, slow decay.
② Long release, damped tone, slower decay than ①.
③ Reverb, some sustain after decay begins.
④ Slow attack, slow volume increase at the start.
⑤ Tremolo I, fade out with slight vibrato.
⑥ Tremolo II, slight vibrato.

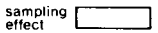
ENVELOPES are most noticeable after you have LOOPed your sample. Why? Because the ENVELOPES are most noticeable on a long held note, in order to hear the swelling in or slow dying away of the sound. If you LOOP your sample first, you can hold the note down for a long time and the sample will keep repeating (rather than just running its 0.6 second course and stopping), and then you can really hear what the ENVELOPE does.

•Activating a Sampled Sound Special Effect

1. Set the tone selector to "sample" and recall your sampled sound.



2. Press the sampling effect button.



3. Press either the loop, reverse, or one of the six envelope keys.

A ride symbal sound confirms your selection.

Notes:

*The reverse effect takes more time to apply than other effects. Continuous high agogo sounds will be heard during internal processing until the final ride symbal sound is heard.

*Loop and reverse effects can be performed and canceled in succession each time the effect key is pressed.

*Three effects (loop, reverse, one of 6 envelopes) can be simultaneously applied to a sampled sound.

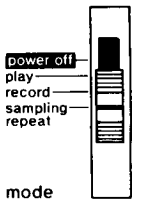
*All effects can be canceled at a time by pressing the sampling effect button followed by the clear key.

USING SAMPLING REPEAT FUNCTION

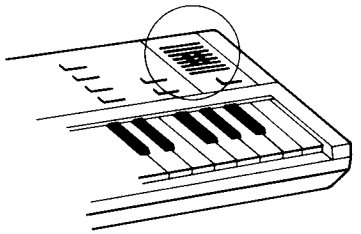
By using the sampling repeat function, any sound you make near the built-in microphone will be instantly transformed into a unique and entertaining musical pattern.

•To use Sampling Repeat Function

1. Set the mode selector to "sampling repeat."



2. Make a sound near the built-in microphone.



*You don't have to press the sampling button.

3. Within a second, one of the 16 patterns featuring the sampled sound will be played back automatically.

Try making many different sounds. You'll enjoy hearing how they sound when they're integrated in various ways in the preset patterns.

Notes:

*When you switch from the sampling repeat mode back to the play mode and the tone selector is set to "sample," the last sound sampled in the sampling repeat mode will sound.

*The keyboard is inoperable when the sampling repeat mode is selected.

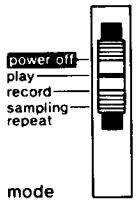
*The auto power off function is inoperate when the sampling repeat mode is selected.

USING AUTO-RHYTHMS

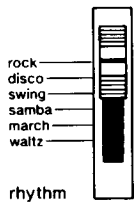
The SK-10's auto-rhythms function features a total of 6 different, preset rhythms.

•Using the Auto-Rhythm Selector

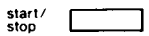
1. Set the mode selector to "play".



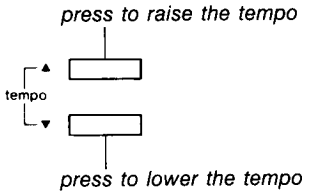
2. Select one of the auto-rhythms by the rhythm selector.



3. Press start/stop button to start the rhythm.



4. Alternately press the tempo control buttons to raise or lower the tempo of the rhythm between 54 and 254 beats per minute. Press both buttons at the same time to set the tempo to 110 beats per minute.



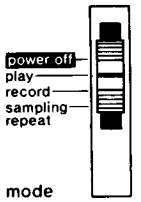
5. Press start/stop button once again to stop auto-rhythm play.

PLAYING DEMONSTRATION TUNES

The SK-10 features 4 demonstration tunes, which are continuously played.

1 .... Heigh-ho
(Frank Churchill)
2 .... Some day my prince will come
(Frank Churchill)
3 .... Who's afraid of the big bad wolf?
(Frank Churchill)
4 .... When you wish upon a star
(Leigh Harline)

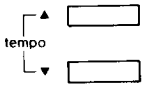
1. Set the mode selector to "play".



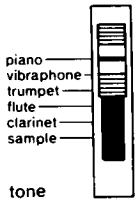
2. Press the demonstration button to start the demonstration tunes.

The demonstration tunes play in an endless loop.

3. When playing the demonstration tunes, the tempo can be raised or lowered between 54 and 168 beats per minute.



4. At first, the demonstration tunes are played with the pipe organ tone. You can freely alter the melody tone of the demonstration tunes by the tone selector. (Auto-rhythm cannot be altered.)



**If you select "sample" after you sampled, you can enjoy the demonstration tunes played with the sampled sound.*

**Each time the demonstration tune changes, the melody tone will be reset to the pipe organ tone regardless of the position of the tone selector.*

5. Press the start/stop button to stop the demonstration tunes.

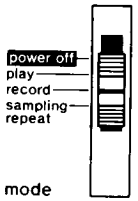
**The keyboard is inoperable while playing demonstration tunes.*

USING THE MEMORY FUNCTION

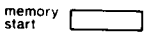
The SK-10 has a memory storage function that allows you to record a tune and play it back.

•Recording a Melody

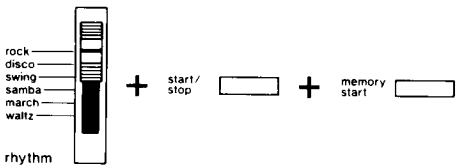
1. Set the mode selector to "record".



2. Press the memory start button. The metronome tone begins to beat, and recording starts as soon as you play a note.

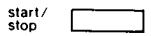


*If you want to add an auto-rhythm to your melody, select a rhythm and press the start/stop button before pressing the memory start button.



*You can freely change the preset tones and auto-rhythms during recording.

3. Press the start/stop button to stop recording.



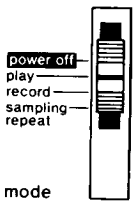
*When you begin a new recording, any notes previously stored in memory will automatically be deleted.

The SK-10 memory can hold 496 steps. A single keyboard note occupies one step. A single change of the tone selector or rhythm selector counts as a half-step.

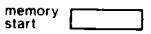
Recording automatically ends when you exceed 496 steps.

•Playing Back a Melody

1. Set the mode selector to "play".



2. Press the memory start button. Playback starts. The melody plays in an endless loop.



3. Press start/stop button to stop the melody.

TROUBLESHOOTING

*For any malfunction, always check battery condition first. (see page 5)

Trouble	Possible Cause	Remedy
No sound, even if keys are pressed.	1. Volume turned down. 2. Auto power off function has activated. 3. The mode selector is set to "sampling repeat".	1. Raise up volume. 2. Set the mode selector to "power off" and to "play" again. 3. The keyboards do not operate when "sampling repeat" is selected. Set the mode selector to "play".
No rhythm.	1. Volume control turned down. 2. The mode selector is set to "sampling repeat".	1. Turn up volume. 2. Set the mode selector to "play".
The sampled tone is deleted.	1. Another sound has been sampled. 2. Power has been turned off.	1. The sound previously sampled is automatically erased if you sample another sound (see page 8). 2. Once you turn the power off (or when auto-power off function activates), the sampled sound is automatically erased.
Occasional interference.	Refrigerators, washing machines and similar electric appliances.	Use outlet as far away as possible from appliance thought to be the cause.
The power indicator temporarily flashes or one of the preset tones sounds continuously in "power off" status.		Slide the mode selector between "power off" and "play" 2–3 times. (This may occur when inserting batteries or connecting the AC adaptor)

CARE OF YOUR KEYBOARD

1. Avoid heat, humidity, and direct sunlight.
Do not overexpose the unit to direct sunlight, place it near a heater, or in any area subject to high temperature.

2. Avoid severe impacts and do not drop.
Severe impacts can result in malfunction. When carrying or transporting the unit, protect the keyboard and controls by packing with soft cloth.

3. Keep the unit free of liquids, dust, particles, etc.
Do not allow foreign matter to enter between the keys. Be especially careful of metallic objects such as hairpins, sewing needles or coins. Also, do not allow the unit to get wet.

4. Never attempt to modify any part of the unit.
Your keyboard is a precision musical instrument made up of sophisticated electronic parts. Any modification of, or tampering with internal components can cause trouble or malfunction.

5. Do not use lacquer thinner or similar chemicals for cleaning.
Clean the keyboard with a soft cloth dampened with a mild detergent solution and squeeze it until almost dry.

6. Remove batteries before extended storage.
Batteries left in the unit for long periods can leak and cause damage to electronic circuitry.

7. In case of malfunction...
Check whether buttons and connections are set correctly as indicated in the troubleshooting chart of page 14 of this manual. If the unit still does not work properly, contact the original retailer or a nearby dealer. Never attempt to repair the unit yourself. This can result in serious damage of the components.

SPECIFICATIONS

Model:	SK-10
Number of keys:	32 (micro-mini)
Polyphonic:	4-note polyphonic
Preset tones:	5; piano, vibraphone, trumpet, flute, clarinet (pipe organ tone in "sample" area unless another sound is sampled.)
Auto-rhythms:	6; rock, disco, swing, samba, march, waltz •Tempo control: ♩ = 54 ~ 254
Real-time memory:	496 steps
Sampling function:	8-bit PCM •sampling rate: 9.38kHz •sampling time: approximately 0.6 seconds •sampling effect: envelope, reverse, loop •sampling repeat: 16 patterns
Demonstration function:	4 melodies (one-touch continuous)
Terminals:	AC adaptor jack (DC 7.5V)
Built-in speaker:	6.5cm dia. (output = 1 W)
Auto power off function:	approximately 7 minutes after last operation
Power source:	5 AA-size dry cells, AC adaptor AD-1 (option) or car adaptor CA-1 (option)
Standard battery life:	approximately 8 hours
Power consumption:	1.6 W
Dimensions:	408(W) × 137(D) × 41.5(H) mm ($160\frac{5}{8}$"(W) × $53\frac{15}{16}$"(D) × $16\frac{5}{16}$"(H))
Weight:	0.8 Kg (1.8 lbs) including batteries
Standard accessories:	5 AA-size dry cells

**Designs and specifications are subject to change without notice.*

GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THE UNIT IN THE U.S.A.
(not applicable to other areas).

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

..... reorient the receiving antenna
..... relocate the computer with respect to the receiver
..... move the computer away from the receiver
..... plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the US Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

WARNING:

CHANGING THE VOLTAGE SELECTOR MAY REQUIRE THE USE OF A DIFFERENT LINE CORD OR ATTACHMENT PLUG, OR BOTH. TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

SK-10

INSTRUMENTO MUSICAL ELECTRONICO
MANUAL DE OPERACION